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the second AC powered fan have motors whose speed is related to the frequency of the AC power for temperature regulation.

REMARKS

The claims have been amended to more precisely define the invention. No new matter has been added. The amendments find support in the specification and drawings as filed.

In the office action, all of the claims were rejected under 35USC 103(a) as being obvious over US patent # 4870833 issued 10/3/89 to Matsuda et al.

It is respectfully submitted that the application is improperly rejected for want of a prima facie showing of obviousness.

It is respectfully submitted that the invention as claimed is unobvious over the prior art for the following reasons:

1. The scope and contents of the prior art:

Although '833 discloses the use of an inverter fed by a generator to power both the evaporator fan motor and the condenser fan motor, their system also feeds inverter power to the compressor motor ("the compressor 12 is not driven directly by the main engine 2", column 3, line 28). In fact, one of the objectives of their construction is to use the type of sealed compressor that includes an integral electric AC motor ("using a compressor 12 of the hermetically sealed type with the driving motor and the compressing mechanism within a casing", column 3, line 52). Another objective is to isolate the compressor speed and output from the engine rotation speed by driving it with an electric motor, ("where the engine speed drops, a speed of the compressor 12 and the others can be kept as rated there around.", column 3, line 32").

a) No teaching or suggestion is made in '833 that compressor be driven by the engine so that its speed is determined by the engine speed. Claimed elements are absent from the combination proposed by the examiner:

b) Applicant's claim elements could not function with the proposed prior art combination since their compressor is not driven by the engine.

These are evidences of unobviousness.

2. If the prior art structure were somehow modified to applicant's claimed operation, it would no longer function as intended by the prior art inventors. Their

compressor speed would then be related to engine speed. This is evidence of unobviousness.

3. There has been no teaching or suggestion to modify the prior art, and the suggested combination would not work as intended.

Since the prior art combination lacks elements of the claims, is opposite teaching, and does not function as intended, it is therefor unobvious. In re Clinton, 527 F. 2d, 188 USPQ365 (CCPA 1976).


The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Applicant's disclosure. In re Vaeck, 947 F.2d 488, USPQ 2d 1438 (Fed.Cir. 1991).

If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious. In re Ratti, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

The showing of suggestion to combine must be clear and particular. Examiner has made no such showing. In re Dembiczak, 175 F.3d 994, 50 USPQ 2d. 1614 (Fed. Cir.1999).

In view of the foregoing, it is urged that the Examiner withdraw the rejections and allow the claims. If there are any comments, questions or suggestions to be made, the Examiner is respectfully invited to telephone the applicant's representative at the telephone number given below for prompt disposition of any still outstanding matters.

Reconsideration is respectfully requested. Respectfully submitted,


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MARKED-UP COPIES OF THE AMENDED CLAIMS

1(amended). A cooling system for a vehicle having a low voltage DC electric supply and an engine, the cooling system comprising:

- a) a compressor driven by the engine, so that the speed of the engine determines the speed of the compressor;
- b) a condenser connected to the compressor;
- c) an evaporator connected to the condenser and the compressor;
- d) a DC to AC inverter connected to the low voltage DC electric supply;
- e) a first AC powered fan connected to the AC output of the inverter for cooling the condenser; and
- f) a second AC powered fan connected to the AC output of the inverter for circulating air through the evaporator and the space being cooled.

2(amended). The cooling system according to claim 1, in which the inverter is capable of providing a variable frequency output, and at least one of the first AC powered fan [has a motor] and the second AC powered fan have motors whose speed is related to the frequency of the AC power for temperature regulation.